

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in this application:

Listing of Claims

Claim 1 (Currently Amended): A multi-layer printing material for forming an image on a substrate, the material comprising

an embossed layer of the multilayer printing material comprising substantially non-overlapping consecutive panels,

wherein each panel is tinted with one of the primary colors,

wherein each panel is diffracts light at a distinct predetermined reflection angle, wherein a value of each distinct predetermined angle is different for each panel, and wherein at least two three panels are tinted with different primary colors.

Claim 2 (Currently Amended): The material of claim 1, wherein each non-overlapping consecutive panel is embossed to diffract incoming light at the distinct predetermined angle different from the angles of reflection of the embossings in other panels.

Claim 3 (Currently Amended): The material of claim 1, wherein each panel comprises a plurality of embossed pixels, wherein all pixels within the same panel diffract incoming light at the distinct predetermined angle different from the angles of diffraction of the pixels in other panels.

Claim 4 (previously presented): The material of claim 1, further comprising a thermally stable layer, a wear resistant layer or top coat, a reflective layer overlaid upon the embossed layer and a heat activated adhesive layer serving to attach the material to the substrate upon heat activation.

Claim 5 (Currently Amended): The material of claim 1, wherein each value of each of the distinct predetermined angles is encoded by one or more numbers, thereby creating a

plurality of numbers for subsequent reading by a reading device, testing the material for presence of reflection angles.

Claim 6 (previously presented): The material of claim 1, wherein the primary colors are yellow, magenta, cyan, and black.

Claim 7 (withdrawn): A method of forming a color image having a holographic appearance on a substrate, the image being comprised of image forming pixels, the method comprising: providing a transfer material having an embossable layer comprising a plurality of panels, wherein each individual panel is tinted with one of the primary colors and is processed to diffract incoming light at a predetermined reflection angle α_a , which predetermined angle α_a is different for each panel; and forming the color image on the substrate by selective pixel transferring of the image forming pixels from each individual panel tinted with one of the primary colors onto the substrate.

Claim 8 (withdrawn): The method of claim 7, wherein selective pixel transferring comprises heat activating of each pixel of the image forming pixels and causing each pixel to separate from the transfer material and to adhere to the substrate.

Claim 9 (withdrawn): The method of claim 8, wherein selective pixel transferring comprises heat activating of each pixel of the image forming pixels and causing each pixel to separate from the transfer material and to adhere to the substrate.

Claim 10 (withdrawn): The method of claim 7, further comprising providing a computer controlling selective pixel transferring of the image forming pixels from the transfer material to the substrate to form the holographic image.

Claim 11 (*currently amended*): A multi-layer printing material for forming an image on a substrate,

wherein any layer of the multi-layer printing material is tinted with one of the yellow-magenta-cyan primary colors,

the multi-layer printing material comprising an embossed layer comprising substantially non-overlapping consecutive panels,

wherein each panel corresponds to one of the primary colors,
wherein each panel is diffracts light at a distinct predetermined reflection angle,
wherein a value of each distinct predetermined angle is different for each individual panel, and
wherein at least two three panels correspond to different primary colors.

Claim 12 (withdrawn): A method of forming an image having a holographic appearance on a substrate, the image being comprised of image forming pixels, the method comprising: providing a multi-layer transfer material wherein any layer of the multi-layer material is tinted with one of the primary colors, the material having an embossable layer comprising a plurality of panels, wherein each individual panel corresponds to one of the primary colors and is processed to diffract incoming light at a predetermined reflection angle α_a , which predetermined angle α_a is different for each panel; and forming the image on the substrate by selective pixel transferring of the image forming pixels from each individual panel tinted with one of the primary colors onto the substrate.

Claim 13 (withdrawn): The method of claim 12, wherein selective pixel transferring comprises blending individual pixels.

Claim 14 (withdrawn): The method of claim 12, wherein forming the color image on the substrate by selective pixel transferring comprises forming stand alone pixels on the substrate.

Claim 15 (Currently Amended): A holographic image formed on a substrate, the holographic image comprising a plurality of holographic pixels, wherein each holographic pixel ~~comprises one or more pixels~~ is tinted in one of the yellow-magenta-cyan primary colors, wherein all pixels tinted in of the same primary color diffract light at a distinct predetermined diffraction angle, wherein values of different distinct diffraction angles are different from one another, different for each primary color, and wherein at least two pixels are tinted with different primary colors.

Application No.: 10/772,752
Amendment dated: September 8, 2010
Reply to Office Action of March 8, 2010
Attorney Docket No.: 22176.28 (ITW-14460)

Claim 16 (New): The material of claim 11, wherein each value of each of the distinct predetermined angles is encoded by a number, thereby creating a plurality of numbers for subsequent reading by a reading device.